



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS  
REGISTRATION DIVISION (7505P)

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DATE OUT: January 4, 2016

SUBJECT: STORAGE STABILITY (830.6317) & CORROSION CHARACTERISTICS  
(830.6320) REVIEW

ACCELERATED STUDY ☐; ONE YEAR STUDY ☒;

OVER 1 YEAR STUDY ☐

MP ☐ EP ☒ EUP ☐

DP BARCODE No.: 430627 REG. No.: 59639-202

DECISION No.: 511917 MRID No(s): 497580-01

PRODUCT NAME: ZEAL SC MITICIDE

COMPANY: VALENT USA CORPORATION

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I. CONCLUSIONS:

STORAGE STABILITY (830.6317):

☒ ACCEPTABLE

☐ UNACCEPTABLE\*

☐ UPGRADEABLE\*

40CFR158.310 DATA REQUIREMENT: ☒ SATISFIED ☐ NOT SATISFIED

CORROSION CHARACTERISTICS (830.6320):

☒ ACCEPTABLE

☐ UNACCEPTABLE\*

☐ UPGRADEABLE\*

40CFR158.310 DATA REQUIREMENT: ☒ SATISFIED ☐ NOT SATISFIED

\* If unacceptable or upgradeable describe the deficiency and provide recommendations



## Comments & Recommendations:

This study demonstrates that Zeal Miticide SC is stable for one year at ambient temperature in representative commercial containers (HDPE bottles). The HDPE bottles containing Zeal Miticide SC retained their integrity for at least one year.

## II. STUDY SUMMARY

### A. STUDY CONDUCTED UNDER US GLP/OECD GUIDELINES

☒ Yes

☐ No

### B. PRODUCT INFORMATION

Active ingredient(s): Etoxazole

Label claim(s) Nominal concentration(s) (%): 31.7

Initial concentration(s) of the AI(s) (%) used in the study: 32.3

Lower certified limits (%) based on AI % on the label: 30.749

Lower certified limits (%) based on AI % in the study: 31.331

### C. EXPERIMENTAL PARAMETERS

Temperature: ☐ Freezer; Room ☐; Warehouse ☒; 54°C ☐; Other ☐

Humidity: Indicate % (if provided)

Duration of study: ☒ 1 year; ☐ over 1 year

Type of container: ☐ Glass; ☐ Metal; ☒ HDPE; ☐ Fluorinated HDPE; ☐ Other

Analysis at intervals: ☒ 0 (initial);

☒ 3 months; ☒ 6 months

☒ 9 months; ☒ 12 months

☐ Over 12 months

#### D. ANALYTICAL METHOD

Method	DETECTOR
Gas chromatography (GC)	<input type="checkbox"/> FID (Flame Ionization Detector) <input type="checkbox"/> ECD (Electron Capture Detector) <input type="checkbox"/> N/P (Nitrogen/Phosphorous Detector) <input type="checkbox"/> Other
Capillary Gas chromatography (CGC)	<input type="checkbox"/> FID (Flame Ionization Detector) <input type="checkbox"/> ECD (Electron Capture Detector) <input type="checkbox"/> N/P (Nitrogen/Phosphorous Detector) <input type="checkbox"/> Other
High Pressure Liquid chromatography (HPLC)	<input checked="" type="checkbox"/> UV/VIS nm – 300 (nm) <input type="checkbox"/> RI (Refractive Index) <input type="checkbox"/> Other
GC-MS / LC-MS	Specify
Other	Specify

#### E. RESULTS

Percentage of Etoxazole in Zeal Miticide SC. VC 1927.  
Stored at Ambient Temperature for Intervals Up to One Year

	0*	3 Months	6 Months	9 Months	12 Months
Glass Control Sample	32.3	32.2	32.0	31.7	31.5
HDPE Test Sample (1, 3, 5, or 7)	32.3	32.4	32.2	31.8	31.5
HDPE Test Sample (2, 4, 6, or 8)	32.3	32.3	32.1	31.6	31.4

\*Time 0 assay was conducted on the bulk sample before filling test and control containers.

No statistical calculations, other than calculation of means, were performed in this study.